PHILIPPINE-AMERICAN ACADEMY OF SCIENCE AND ENGINEERING

PAASE Monthly Newsletter

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Global Women's Breakfast 2025 Celebration

The Global Women's Breakfast 2025, held in conjunction with the United Nations International Day of Women and Girls in Science, brought together thousands of scientists from nearly 100 countries to discuss overcoming barriers to gender equality and equity in science. The event, co-organized by the Philippine American Academy of Science and Engineering (PAASE), Central Mindanao University, and the Institute of Chemistry at the University of the Philippines Los Banos, aimed to accelerate equity in science. The Philippines, ranked 17th globally in closing the gender gap in STEM, was highlighted as a shining example in Asia. The event featured a special video presentation by PAASE, showcasing inspiring work in creating more inclusive and equitable science communities. The program also included a TikTok entry that earned second prize in the global TikTok challenge by IUPAC relative to the GWB 2025 celebration. The event encouraged active engagement and participation in the global movement to envision a future where science is truly for everyone.

The meeting began with the host welcoming everyone and introducing the program agenda. Dr. Gladys J. Completo, the President of PAASE, gave opening remarks. The first speaker, Dr. Aimee Barion Dupo, shared her inspiring journey in STEM, emphasizing the importance of resilience, passion, and perseverance. The second speaker, Dr. Arlene Bartolome, discussed her journey from being a chemist to a plant biologist and food scientist, highlighting the value of embracing failures as learning experiences. The third speaker, Dr. Joanne Narciso, talked about her journey from being a chemist to a plant biologist and food scientist, emphasizing the importance of collaboration and the integration of multiple scientific disciplines. The conversation ended with the recognition of the speakers and the announcement of the winners of the TikTok challenge.

Dr. Dupo discussed the importance of mentorship and support in the field of science, particularly in STEM disciplines. She shared her personal journey, highlighting the influence of her parents, mentors, and peers on her development as an ecologist. Dr. Dupo also emphasized the importance of science communication, using social media and local examples to make scientific concepts more accessible. Dr. Dupo also highlighted the need to expose young scientists to field activities and informal training early on, and to encourage them to pursue STEM careers.

Dr. Bartolome shared their personal journey from aspiring pediatrician to Senior Scientist at Pfizer, highlighting the challenges, doubts, and discoveries that shaped their path in chemistry. She recount how a passion for science emerged in high school, ultimately leading to a career in research. Through this talk, the speaker aims to inspire others to explore scientific fields whether in biology, physics, math, or chemistry despite obstacles. Additionally, she provided insights and resources for those considering graduate studies abroad.

Dr Joan Narciso shared her academic and professional journey, starting with her undergraduate studies in natural products chemistry, focusing on plant foods and

their bioactivity. She then pursued a master's in biochemistry and molecular biology, working on a drought tolerance gene in rice. Joan continued her research in plant cell and molecular biology for her PhD at the University of Melbourne, Australia, where she discovered and characterized the enzymes that produce glycans of arabinogalactan proteins. After completing her PhD, Dr. Narciso worked as a research technician in a food biochemistry lab and later held postdoctoral positions in plant biology. She then moved to Switzerland to work on Kabog Millet, an endangered crop in the Philippines. Currently, Joan is working on novel strategies to reduce protein allergen levels in foods at the University of Lake Yada.

The meeting involved discussions on engaging marginalized communities in research and science. Dr. Dupo and Dr. Narciso shared their experiences and strategies for reaching out to these communities in the Philippines. Dr. Dupo emphasized the importance of increasing membership and reaching more islands in the country, while Dr. Narciso highlighted the need for persistence and perseverance in making a positive impact.

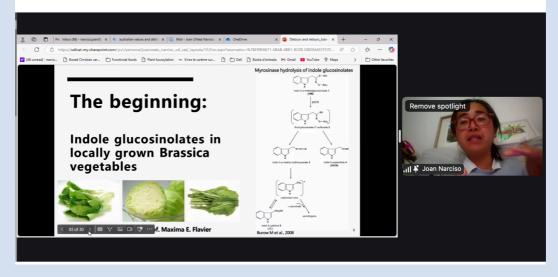
The speakers shared their experiences and insights on overcoming challenges and achieving success in their respective fields. The discussion also highlighted the importance of nurturing curiosity, resilience, and collaboration in the pursuit of knowledge and progress.

Facebook live link: https://fb.watch/xPB5vv2-AG/

Tiktok Video Link: https://web.facebook.com/reel/637611108726585









Featured Article from SciEnggJ

In this issue of the PAASE Newsletter, we feature a critical study published in SciEnggJ highlighting research on:

Balancing hope and hype on hydrogen's role in the Philippine energy transition

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Hydrogen (H_2) offers a promising opportunity to transform the Philippines' energy sector. As a clean energy source, it can power industries, transportation, and electricity generation—helping the country combat climate change and move toward a more sustainable future. However, before hydrogen can reach its full potential, key challenges must be addressed, particularly in regulations and policies.

For hydrogen to become a viable energy solution, the country needs clear rules on infrastructure development, safety standards for production and storage, faster permitting processes, better monitoring of renewable energy-powered electrolysis, stronger support for research and innovation, and incentives for hydrogen-based products.

This policy brief explores the current state of hydrogen energy in the Philippines, identifies policy and regulatory gaps, and outlines the steps needed to build a strong hydrogen sector. A well-designed policy framework—covering regulations, financial incentives, technical expertise, and strategic export plans—will help the Philippines make the most of its renewable resources, strengthen energy security, and reduce emissions.

Dive into this fascinating discovery by reading the full research article in *SciEnggJ*. DOI: https://scienggj.org/2024-156/



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COMMENTARY

Balancing hope and hype on hydrogen's role in the Philippine energy transition

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KEYWORDS: green hydrogen, policy recommendations, energy vector, energy transition, renewable energy

Hydrogen (H₂) presents a unique opportunity for the Philippines' energy landscape. Using hydrogen as an 'energy vector' for industrial, power, and transportation applications represents a promising and sustainable solution in its ongoing efforts to address climate change and transition towards a cleaner energy future. However, unlocking this potential requires first addressing regulatory and policy gaps. This challenge has many different facets, such as the need for regulations to support the hydrogen infrastructure development, the establishment of clear standards for safe hydrogen production, storage and handling, streamlining of permit and license applications, monitoring of solar or wind power plants coupled with electrolysis process, provision of more substantial support for research and innovation, and promotion of hydrogen-based products. This policy brief describes the current landscape and identifies the regulatory and policy gaps that policymakers must fill while highlighting the Philippines' potential for hydrogen energy and energy storage in the short and long run. It is crucial to have a complete policy framework that addresses regulatory clarity, financial incentives for infrastructure development, technical capacity, support for R&D, and strategic export planning. The Philippines can utilize its renewable resources, improve energy security, and cut emissions by filling these gaps.

PAASE STEAM Career Orientations

We are inviting everyone to join us in the upcoming PAASE STEAM Career **Month** this April 2025. This is part of PAASE's foundation month celebration.

The goal of the PAASE STEAM Career Month is to provide students at the high school level particularly those in Grades 11 and 12, with valuable insights on the different STEAM fields so that they are equipped with the knowledge, resources, and inspiration to make well-informed decisions for pursuing careers in science, technology, engineering, arts, and mathematics. Throughout the month-long event, students will engage in interactive sessions and discussions led by accomplished professionals, experts and leaders in their respective STEAM fields.

Event Details

Dates:

April 5, 12, 26 (Saturdays, 9-11 AM), Online via Zoom Platform

Zoom Meeting ID: 836 8937 4899

Passcode: STEAM2025

Zoom Registration: https://bit.ly/40Ri0IK

Themes:

- April 5: Engineering, Data Science, Physics, Information Technology
- April 12: Health Sciences, Chemistry, Marine Science, Agriculture
- April 26: Careers in Academia, Industry, Government, and Innovation (Startups)

Kindly share this event invite to colleagues and highschools that might be interested to attend. Thank you very much.







APAMS 2025

APAMS 2025 CALL FOR ABSTRACTS!

Join us in celebrating PAASE@45 at the 2025 Annual PAASE Meeting & Symposium at the University of South Carolina, USA!

We invite submissions for oral and poster presentations for the Online REC Symposium and Poster Competition (July 14-15, 2025, US) and In-Person Meeting (July 19-20, 2025, US).

Abstract Submission Deadline: May 15, 2025

Submit here: https://bit.ly/4009Tqb
Be part of shaping the future of research, discoveries, and innovations in science and engineering!

For inquiries, email apams.paase@gmail.com. #APAMS2025 #CallForAbstracts #PAASE45



Join us in celebrating PAASE@45 at the 2025 Annual PAASE Meeting & Symposium!

We invite submissions for the Graduate Fellows Application.

Application Deadline: May 15, 2025

Submit here: https://bit.ly/4hx306S

Be part of shaping the future of research, discoveries, and innovations in science and engineering!

For inquiries, email apams.paase@gmail.com. #APAMS2025 #PAASE45



APAMS 2025 POSTER COMPETITION!

Join us in celebrating PAASE@45 at the 2025 Annual PAASE Meeting & Symposium at the University of South Carolina, USA!

Online REC Symposium & Poster Competition: July 14-15, 2025 (US) | July 15-16, 2025 (PH)

In-Person Meeting: July 19-20, 2025 | University of South Carolina

Poster Competition with Cash Prizes!

Top 10 posters will be chosen for the Rapid Fire Competition (3-minute talk + 2-minute Q&A).

Submit your abstract by May 15, 2025!

Submit here: https://forms.gle/D23ofhpX7swfbVAdA
For inquiries, email apams.paase@gmail.com.

#APAMS2025 #PAASE











Congratulations, Dr. Guinto

We are thrilled to announce that Dr. Ramon Lorenzo Luis R. Guinto has been awarded the inaugural Kiyoshi Kurokawa Award 2025 by the Japan-based Health and Global Policy Institute (HGPI).

This recognition is a testament to Dr. Guinto's outstanding contributions to global health policy and his unwavering commitment to improving health outcomes for communities worldwide.

Congratulations, Dr. Guinto! Your dedication and hard work inspire us all!



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Thank you for your continued support and participation in PAASE. We appreciate your dedication and commitment to our organization.

Gladys Cherisse J. Completo Technical Editor

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